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FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. APPLICATION NO. FILING DATE 1214-011212 1754 07/31/2001 Shin Hiwasa 09/890,438 EXAMINER 28289 7590 10/14/2005 LAVILLA, MICHAEL E THE WEBB LAW FIRM, P.C. 700 KOPPERS BUILDING PAPER NUMBER ART UNIT 436 SEVENTH AVENUE

1775
DATE MAILED: 10/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary		Application No.	Applicant(s)		
		09/890,438	HIWASA, SHIN		
		Examiner	Art Unit		
		Michael La Villa	1775		
The MAILING DATE of Period for Reply	t this communication app	pears on the cover sheet with the o	correspondence ad	dress	
WHICHEVER IS LONGER,  - Extensions of time may be available to after SIX (6) MONTHS from the mailing of the second	FROM THE MAILING D. under the provisions of 37 CFR 1.1 ng date of this communication. ve, the maximum statutory period v ided period for reply will, by statute than three months after the mailing	Y IS SET TO EXPIRE 3 MONTH ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tir will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE g date of this communication, even if timely filed	N. nely filed the mailing date of this co ED (35 U.S.C. § 133).		
Status					
2a)⊠ This action is <b>FINAL</b> .  3)□ Since this application	is in condition for allowa	uly 2005. action is non-final. nce except for formal matters, pre Ex parte Quayle, 1935 C.D. 11, 4		e merits is	
Disposition of Claims					
4)⊠ Claim(s) <u>16,19 and 21</u> 4a) Of the above claim 5)□ Claim(s) is/are	is/are withdrawallowed.			·	
` <u> </u>	6) Claim(s) 16,19 and 21-23 is/are rejected.				
7)⊠ Claim(s) <u>24-26</u> is/are ∈ 8)□ Claim(s) are su	objected to. bject to restriction and/o	r election requirement			
		r oloolon roquiroment.			
Application Papers		•	·		
9) The specification is obj	·		_		
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
		drawing(s) be neid in abeyance. Se ion is required if the drawing(s) is ob		ED 1 121/d)	
<u>.</u>		caminer. Note the attached Office		, ,	
Priority under 35 U.S.C. § 119	,				
		priority under 35 U.S.C. § 119(a	)-(d) or (f).		
<ol> <li>Certified copies of the priority documents have been received.</li> </ol>					
2. Certified copies of the priority documents have been received in Application No					
3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.					
See the attached details	ed Office action for a list	of the certified copies not receive	<del>2</del> 0.		
Attachment(s)					
Attachment(s) 1)  Notice of References Cited (PTO-	892)	4) Interview Summary	(PTO-413)		
2) 🔲 Notice of Draftsperson's Patent D	rawing Review (PTO-948)	Paper No(s)/Mail D	ate		
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application (PTO-152)  6) Other:					

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#### **DETAILED ACTION**

## Specification

- 1. The amendment filed 28 July 2005 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: The amendment at pages 5 and 6 that adds the text "(2-ferroceniumethyl) ferrocenium cation" appears to introduce new matter. The basis for the amendment is apparently the formula at page 4, which encompasses this cation. However, the formula and accompanying description do not appear to lead one of ordinary skill in the art to this cation as opposed to any of the others encompassed by the formula. Therefore, it is unclear how applicant has established that the disclosure reasonably conveys to one of ordinary skill in the art that applicant was in possession of this subject matter at the time of filing.
- 2. Applicant is required to cancel the new matter in the reply to this Office Action.

## Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the first paragraph of 35 U.S.C. 112:
- 4. The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 5. Claim 21 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter

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which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. It is unclear how the disclosure of the formula at page 4 and the accompanying discussion reasonably convey to one of ordinary skill in the art that applicant at the time of filing was in possession of the claimed cation, namely, (2-ferroceniumethyl) ferrocenium cation, as a species of the generic formula provided on page 4.

# Claim Rejections - 35 USC § 102

- 6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:
- 7. A person shall be entitled to a patent unless -
- 8. (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- Claims 16,19, and 21-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Shouzaki et al. USP 6,100,352 for the reasons of record in the Office Action mailed on 26 April 2005.

# Claim Rejections - 35 USC § 103

- 10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which

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said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 11. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  - 1. Determining the scope and contents of the prior art.
  - 2. Ascertaining the differences between the prior art and the claims at issue.
  - 3. Resolving the level of ordinary skill in the pertinent art.
  - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 12. Claims 16, 19, and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shouzaki et al. USP 6,100,352 for the reasons of record in the Office Action mailed on 26 April 2005.

# Response to Amendment

- In view of applicant's amendments and arguments, the claim objections of the Office Action mailed on 26 April 2005 are withdrawn.
- II. In view of applicant's amendments and arguments, the section 112, second paragraph rejections of the Office Action mailed on 26 April 2005 are withdrawn.
- III. In view of applicant's amendments and arguments, applicant traverses the section 102 and 103 rejections over Shouzaki of the Office Action mailed on 26 April 2005. Applicant argues that the catalyst of Shouzaki comprises additional ingredients that should be precluded by the claimed "consists of" language

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of Claim 16. Referencing applicant's argument at page 8 of the Response of 28 July 2005, Shouzaki's catalyst requires ingredients (a), (b1), possibly (b2), and possibly (d), whereas the claimed materials would seemingly only involve the (b1) component. That the claimed compounds encompass Shouzaki's (b1) component is apparent at col. 14, lines 40 et seq., where disclosed (b1) compounds that meet the requirements of formula (XVII) in Shouzaki are listed, including "ferrocenium tetraphenylborate," among others. These compounds are encompassed by the formula of Claim 16. Shouzaki teaches forming the catalyst of Shouzaki by mixing (b1) compounds with other ingredients of the catalyst of Shouzaki. See, for example, col. 17, lines 1-12. Therefore, Shouzaki's (b1) compounds, which are encompassed by the claimed formula of Claim 16, are taught in isolation, which the "consists of" language of Claim 16 requires. Since the (b1) compounds are taught in isolation, the claimed invention is taught, notwithstanding that Shouzaki may utilize the compounds in a different catalytic process that requires the presence of additional co-catalyst ingredients. Rejection is maintained.

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IV. Rejection under double patenting and sections 102 or 103 over Hiwasa USP 6,387,975 and rejection under sections 102 or 103 over Hiwasa WO 99/06419 are not appropriate since the n values of four or five in these references are not encompassed or suggested by the claimed n values of zero to three in the claimed formula of Claim 16.

V. Rejections under sections 102 or 103 over Sato USP 6,660,816 are not appropriate since Sato does not teach or suggest forming an initiator that consists of the claimed crystalline ion-association substance of the claimed formula. Mixtures that may comprise the components of the substance cannot be said to necessarily comprise the crystalline ion association substance of the claimed formula.

## Allowable Subject Matter

13. Claims 24-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. See the reasons of record in the Office Action mailed on 26 April 2005.

#### Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

- 15. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.
- 16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael La Villa whose telephone number is (571) 272-1539. The examiner can normally be reached on Monday through Friday.
- 17. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on (571) 272-1535. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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18. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael La Villa 12 October 2005

MICHAEL E. LAVILLA PH.D.